DECISION MEMORANDUM

TO: COMMISSIONER KEMPTON

COMMISSIONER SMITH COMMISSIONER REDFORD COMMISSION SECRETARY

COMMISSION STAFF

LEGAL

FROM: NEIL PRICE

DEPUTY ATTORNEY GENERAL

DATE: JANUARY 8, 2010

SUBJECT: AVISTA'S 2009 ELECTRIC INTEGRATED RESOURCE PLAN (IRP);

CASE NO. AVU-E-09-09

On August 31, 2009, Avista Corporation dba Avista Utilities ("Avista") filed its 2009 Electric Integrated Resource Plan (IRP) with the Commission pursuant to the Commission's biennial IRP filing requirements mandated in Order No. 22299, and later modified in Order No. 24729 and Order No. 30262.

On October 9, 2009, the Commission issued a Notice of Application and Modified Procedure and established a 60-day open comment period. *See* Order No. 30928. Subsequently, Commission Staff and the Idaho Conservation League ("ICL") were the only parties to submit written comments regarding Avista's 2009 IRP.

AVISTA'S INTEGRATED RESOURCE PLAN

Avista is headquartered in Spokane, Washington and serves electric customers in northern Idaho. Avista states that the 2009 IRP "guides the utility's resource acquisition strategy over the next two years and the overall direction of resource procurements for the remainder of the 20-year planning horizon." IRP Executive Summary at i. Avista also states that its "Preferred Resource Strategy (PRS) is a mix of renewable resources, conservation, upgrades at existing facilities, and new gas-fired generation." *Id*.

The following is a summary of the Company's 2009 IRP filing:

• Avista contends that conservation and plant upgrades will not be enough to compensate for an anticipated 1.7 percent energy and capacity load growth and the expiration of long-term contracts in the future. *Id.* The Company estimates that it will experience annual energy deficits

beginning in 2018, increasing to 126 aMW in 2022 and 527 aMW in 2029. *Id.* Capacity deficits are forecasted to be 139 MW in 2022 and 667 MW in 2029. *Id.*

- Avista states that the development of it PRS began with the "identification and quantification of potential new resources" to serve future resource demands. *Id.* at iii. Avista then performed a Western Interconnect-wide study "to understand the impact of regional markets. . . ." *Id.* The Company subjected data developed "from over 250 iterations of potential future conditions" to a "Monte-Carlo style analysis" and "the results were used to estimate the Mid-Columbia electricity market. . . ." *Id.* Ultimately, the selection of the PRS was "based on forecasted energy and capacity needs, resource values, state mandated portfolio standards, and limiting power supply expense variability." *Id.*
- The IRP notes the strong correlation between natural gas prices and electricity prices because gas-fired generation is currently the marginal resource relied upon within the Western Interconnect. *Id.* at v. The Company forecasts that the "Mid-Columbia market price is expected to average \$79.56 per MWh in 2009 dollars" through 2029. *Id.* at iv.
- Avista again included carbon emissions in its "Base Case" cost estimates. *Id.* at ix. *Id.* Not surprisingly, the Company projects a precipitous rise in carbon dioxide emissions prices over the next twenty years. *Id.*, Figure 8, at viii.
- The 2009 PRS aims for an additional 250 of Nameplate (MW) Capacity of Combined Cycle Combustion Turbine (CCCT) by 2019, 2024 and 2027; 150 MW of NW Wind by 2012 and 2019, and 50 MW by 2022; 5 MW of Distribution Efficiencies by 2010-2015; 5 MW in Upgrades to its Little Falls and Upper Falls hydro facilities by 2020; 339 MW of conservation throughout the planning period. *Id.*, Table 2, at viii.

STAFF COMMENTS

Public Process

Staff began its analysis with a summary description of its participation in the preparation of Avista's 2009 IRP document. *Comments* at 2. Staff notes that it was in "close contact" with Company officials during the preparation of the document and offered comments throughout the process. *Id.* Staff is satisfied that Avista adequately addressed "Staff's comments in preparing the final IRP document." *Id.* Staff mentioned that public participation in the IRP process was improved but it "continues to be difficult to achieve full participation from a broad cross section of customers and interest groups." *Id.* Staff urges the Company to "continue its

efforts to involve key customers, customer group representatives, environmental organizations, and others . . . on the Technical Advisory Committee." *Id*.

Load Forecast

Staff believes that the load forecast prepared by Avista is reasonable. *Id.* at 3. Staff notes that Avista's economic forecast was completed in July 2008, more than a year before the final IRP was submitted. *Id.* Thus, "Staff does not believe that the full impact of the current recession is reflected in the Company's load forecast." *Id.* Nevertheless, does not believe that questions regarding the accuracy of the economic forecast are problematic because the Company is in a "surplus condition for several years into the future." *Id.* Further, new resource additions are planned for the future when forecasted loads are expected to rebound to forecasted levels. *Id.*

Environmental Policy

Staff notes the increasing impact that environmental issues have upon electric utility resource planning. *Id.* at 4. The Company devoted a substantial portion of its IRP document to environmental policy and has instituted a formal Climate Change Committee to monitor new emissions legislation and issues. *Id.* Avista laid out its plan to comply with all existing state regulations (WA) of greenhouse gas emissions and "has made reasonable assumptions about the content, timing and costs of meeting proposed federal requirements." *Id.*

Demand-Side Management and Supply-Side Efficiency

Avista's IRP discloses the Company's plan to "acquire 102 aMW of energy efficiency over the next 10 years and 226 aMW over 20 years." *Id.* It is anticipated that these energy efficiency gains will shave 153 MW from the 2020 system peak and 339 MW from the 2029 system peak. *Id.*

Energy Efficiency

Staff detailed the Company's processes in "identifying energy efficiency improvement potentials. . . ." *Id.* In identifying potential energy efficiency improvements, the Company relies primarily "upon the Northwest Power and Conservation Council's Power Plans and its own contracted studies of energy savings potentials." *Id.* at 5. The last contracted study was conducted in 2005 and Avista states that it will contract another study prior to its 2011 IRP filing. *Id.* The energy efficiency goals identified during the IRP process "helps the Company develop its conservation business plan and establish acquisition targets, while meeting its regulatory requirements." *Id.* While Staff believes that Avista's approach to identifying and

updating DSM potential is well-reasoned," it urged the Company to utilize all of its options in evaluating potential DSM programs so as to ensure "maximum, long-term cost-effective DSM for a utility's entire customer base and equitable treatment among its customers." *Id*.

Resource Options

Staff summarized the resource options considered by Avista to "meet future resource deficits." *Id.* at 6. In addition to conservation programs, the Company also evaluated "upgrading existing hydro projects, building new facilities and contracting with other energy companies for future delivery." *Id.* Simple and combined-cycle gas-fired combustion turbines remain a reliable and relatively inexpensive source of both energy and capacity. *Id.* Staff added that the main drawback for these types of facilities continues to be the cost volatility associated with natural gas. *Id.*

The Company is not considering adding a pulverized coal facility for the 2009 IRP. *Id.* "Concerns over the environmental impact of carbon-based generation technologies have increased demand for renewable generation, particularly wind." *Id.*

Washington State Renewable Portfolio Standard

Staff addressed the impact that the 2006 Washington state voter initiative (I-937), the Energy Independence Act, had upon the Company's decision to acquire new renewable resources. *Id.* at 7. Avista was compelled by the statute to acquire renewable resources that it would not otherwise need to meet forecasted loads through the year 2017. *Id.*

Staff declined to express a position as to the prudency of these acquisitions. *Id.* at 8.

Preferred Resource Strategy

Staff commented that Avista's Preferred Resource Strategy (PRS) over the 20 year IRP planning period will include the acquisition of approximately 1,449 MW's in Nameplate capacity of "hydro upgrades, wind, conservation, distribution efficiency programs and natural gas-combined cycle gas turbines." *Id.* "Following the acquisition of the wind/renewable that Avista is currently seeking, the next large capacity addition would be a 250 MW combined cycle combustion turbine in 2019." *Id.*

Avista will be seeking at least 150 of wind capacity by the end of 2019 in order to meet Washington's RPS standard and another 50 MW wind resource in 2022 due to additional RPS obligations created by anticipated load growth over that time period. *Id.* at 9. Finally,

capacity deficits in 2024 and 2027 will force the Company to acquire another 250 MW natural gas combined-cycle plant. *Id*.

Differences from the 2007 IRP

Staff cites the Company's increased reliance on wind resources as the major difference between the 2007 IRP and the current IRP. *Id.* Wind was selected over other renewable resources due to its availability in large quantities. *Id.*

Risk Analysis

Staff agreed that Avista's PRS is "superior to the other resource strategies considered in the IRP." *Id.*

Transmission

Staff commented that the Company's transmission planning and IRP planning process appears "to be much more closely aligned and better coordinated than in the past." *Id.* at 10. Avista included a new segment in its current IRP with an "analysis of potential distribution system efficiency improvements" and a multi-phase plan to identify and "evaluate potential energy savings from transmission and distribution feeder upgrades." *Id.*

2009 Action Plan Items

The Company identified specific action plan items in five key areas to be developed and studied in Avista's 2011 IRP: resource additions and analysis, energy efficiency, environmental policy, modeling and forecasting enhancements and transmission planning. *Id.* Staff believes that the listed action items are reasonable and will support Avista's PRS/planning process going forward. *Id.* at 12.

IDAHO CONSERVATION LEAGUE COMMENTS

The Idaho Conservation League (ICL) is "Idaho's largest state-based conservation organization" representing over 9,500 members. *ICL Comments* at 1. ICL is generally supportive of Avista's 2009 IRP and focused its comments on three main issues: energy efficiency, renewable energy, and carbon emissions. *Id.* ICL applauded Avista's plan to meet "26 percent of its new load growth through 2020 with energy efficiency" and was "pleased to see the Preferred Resource Strategy (PRS) includes 350 megawatts of wind generation." *Id.* The organization encouraged Avista to "explore other non-wind renewable energy options." *Id.* ICL was also "pleased to see no significant increase in carbon emissions over the 20-year timeframe

in the PRS. . . . " *Id.* at 2. ICL generally supports efforts by the utility to develop "a more diverse renewable energy portfolio and increasing energy savings with efficiency." *Id.*

STAFF RECOMMENDATIONS

Staff stated that Avista's resource needs are largely driven by the Company's obligation to meet Washington's RPS standards and not its overall load-resource balance. *Id.* Accordingly, Staff recommends that the Commission "scrutinize the Company's decision for early acquisition of renewables at the time it makes a filing to begin recovering the cost of renewables in customer rates." *Id.* at 13. Staff also recommends that the Commission address the Idaho and Washington jurisdictional allocation issues presented by the acquisition of new resources in order to meet Washington's RPS standards and not load growth. *Id.* Because the 2009 IRP was based upon a load forecast which was finalized prior to the full impact of the current recession, Staff recommends that Avista revisit that forecast and make appropriate revisions in its 2011 IRP. *Id.* Staff recommends that the Commission accept and acknowledge Avista's 2009 IRP. *Id.*; *see also Errata to Staff Comments* at 1.

COMMISSION DECISION

Does the Commission wish to accept and acknowledge Avista's 2009 IRP filing?

Neil Price

Deputy Attorney General

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